Vehicle Safety Priorities of the United States

148th Session of WP.29
June 2009
Motor Vehicle Crashes in U.S.

- Vehicle Type
- Crash Partners
- Body Region Injured and Societal Costs
- Crash Avoidance
- Crashworthiness
Fatalities by Vehicle Type

- Occupants of Large Trucks, 802, 2%
- Buses, 37, 0%
- Unknown/Other Occupant, 629, 2%
- Motorcyclists, 5,154, 13%
- Passenger Vehicle Occupants*, 28,933, 70%
- Nonoccupants**, 5,504, 13%

*Data provided for year 2007
# Fatalities by Person Type

<table>
<thead>
<tr>
<th>Person Type</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Fatalities</strong></td>
<td><strong>41,059</strong></td>
</tr>
<tr>
<td>Passenger Vehicle Occupants</td>
<td>28,933</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>5,154</td>
</tr>
<tr>
<td>Large Truck, Bus, Other Vehicle Occupants</td>
<td>1,468</td>
</tr>
<tr>
<td>Nonoccupants</td>
<td>5,504</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>4,654</td>
</tr>
<tr>
<td>Pedalcyclists</td>
<td>698</td>
</tr>
</tbody>
</table>

*Data provided for year 2007*
Fatalities by Crash Type

Passenger Cars

- Frontal Impact with Another MV
- Side Impact with Another MV
- Rear Impact with Another MV
- Impact with Fixed Object
- Impact with Non-fixed Object
- Other/Unknown
- Noncollision

Light Truck

- Frontal Impact with Another MV
- Side Impact with Another MV
- Rear Impact with Another MV
- Impact with Fixed Object
- Impact with Non-fixed Object
- Noncollision
Priorities and Projects

- Large Safety Benefits
  - The size of the target population;
  - The effectiveness of countermeasures, i.e., their potential to save lives and prevent injuries;
  - The availability and practicability of these countermeasures;
  - The potential that countermeasures could be developed in the future that could be reasonably effective against a large target population.
Priorities and Projects

- Vulnerable Populations
  - Children
  - Pedestrians

- High Occupancy Vehicles
  - Buses or Motorcoaches
Crash Avoidance Priorities

- Forward Collision Avoidance and Mitigation
- Lane Departure Prevention
- Vehicle-to-Vehicle Communication
- Motorcycle Antilock Braking Systems
Crashworthiness Priorities

- **Side Impact**
  - Pole Test
  - Child Protection
  - WorldSID 50\textsuperscript{th} Male dummy
  - WorldSID 5\textsuperscript{th} Female dummy
  - 3 year-old Qs dummy

- **Rollovers**
  - Ejection Mitigation
  - Restraints Systems
Heavy Vehicles

- Heavy Vehicle Stopping Distance
- Truck Tractor Stability Control
- Heavy Vehicle Forward Collision Avoidance and Mitigation
- Motorcoach
  - Lap/Shoulder Belts
  - Fire Safety
  - Emergency Evacuation
  - Roof Strength
Thank you very much for your attention